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25	actcacgatc caaactatga attttagatt cggatcaaac gaggattgat cc	gagggacc	: 18	0
	aacgttgtga taaatcttac gtcgtcttat atattaagtt tttgtggagg atcgg	gataag 2	240	
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	ggaccgcggt ctaatggg 318			
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     cccacatttc catttttaat atatactgtg ctttacaaat attataatat gttttaaaat 180
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     atgttcacag aagcacctgg tctgtgaatg gcatgccagc attaaaaaaa ataagcattc 240
     tttgaatata tatttagttt tttaatgtgg taggaaaatc aaagccagag ggagtagaaa 300
     caaaatttgt gattttctaa atacttcttg gctgcaggga agaaaccacg tcccaggcga 360
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438

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    aaagggggaa ggccccaaa accgggggg gggnaaaaag gtgggtttcc ccctttttcc 180
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- 45 caaattgggg ggnaaaccaa atttaagggg ggaagggggg gnccccccg ggaaaggccc 180

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aaggggggaa aatttttccg ggggtgggtn gggggaacca atttaagggg ggggccccg 240
    ggggggttcc ccttgggccn tttttccttt tgggtnaaaa aaaaaaaaccc cttg
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    aagtttaatc cetgggttet aactaceett aetgteaett agettaaeet geeteeaate 120
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    ctgtacttga actctaaaac tgttggagaa actcagtgct taccccaaca gattcatttc
                                                                 180
    aaatagetgt aaaaggtatg tttactccag aagaccagag ttgettettt tgaacttete 240
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    attecttggg cetaggaace etcateacee teateceaae gteaaceeag atettetett 300
    ccataaacag cactccctca ggcccctgcc tgacacaggc atagactgtc atgttggatt 360
    cacagacagg ctgtgctaga ggaaacctct ggggctcacc aggggccgtg ggatgggctt 420
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    cggcccgggc ccgggnagcc cttcccgggc ttttcccccg gggggggnccc gggggggacc 120
    tttaggegge accecaacaa caccaggeec tactttttee aaggnegggg aageecatgg 180
45
    gttctgggna acgggcaatg cgggcttgca acgggnggaa naaaaacagn cccaaaagaa 240
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tg 242

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c 181

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                                                                      60
20
    tneccencen nttnanaena aanntngeae tettggntge
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15
    aagggggtg gggaagagcc aaatttcttt gggaaanaac gccccttgg ggaaaanaag 180
    gccaaccacc tttcaacanc ccccaangcg nggaagccat ttcttgg
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    aggagaaata taactgcaga ggagctttga aaatttagtt cagctgaggg taaaggaaga 240
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40
     ttgaggcgaa aggactcgcg gatttgacgc ttgatgcggt tgcgctcgac ggcgagcttg
                                                                     180
     acgetetttt tgeegateae caaacetagg eggggatgat eaagetggtt ategegeget 240
     agcagcagga cacttttgcc cgggagcttt accgcttggg gagtcgaaga ctgccttgna 300
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     ttgccgggga gtcagcagtc gctttttccc ggncgaagcc tcgaactcac cancetgtct 360
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                                                 492
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                                                                       120
    gagaaccccg cacaccgaaa ggctaaggat tcctccgcta tgtcaatcaa cggagggtta 180
45
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 agtgggtgaa acgccagcgc atggcaaccc gtaccgcaaa ccgacacagg tagccggggg 420
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    aagaaggaac ccaccetngg ggccaaacaa aaacttaaaa acccccccat ttentneccc
20
                                                               231
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                                                                       60
                                                                 109
    atteggeaeg agggattaea gtegtgagee aetgeaeetg getgeaatt
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                                                                      60
10
    cantcantng ttgccntntg atacccnana caaaattgaa
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                                                                    60
                                                              100
    ganggtcgnn aanttaggnt tccagcctgc gncacngcca
40
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    agnnttncag cengnnnnan tgecattttn getetnnnga gaaa
                                                                104
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    ccgccaantt ttttcnaacc cnacttgttt tnggttttag tt
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    naaattaggg ttncagcntg tgnantgcca ttttcgntaa
                                                            100
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                                                           100
35
   tttenenntn tggtgtnegg etnteaegea tnggegegag
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 - <220>
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- 20 <222> (46)..(46)
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 - <220>
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   cacgcacggc agegagtgca atgnccgatt cattettnaa cgacgcacac accengnngc 120
10
                                                          153
    cctgtgaaac ccataaacag tgggaaatgg tgc
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- 40 <400> 37 gegegentgn aggeceegae actagtggat ceaaagtatt ttggeaegag etnagttega 60 ngatnnagae enennateae etaataeane eatnactean atgaetnttt gtgegeettt 120
- 45 tatcanatge atagectate naaaacatea e 151

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25 <222> (63)..(63)
    <223> n is a, c, g, or t
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30 <222> (72)..(72)
    <223> n is a, c, g, or t
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35 <222> (79)..(79)
    <223> n is a, c, g, or t
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                                                                     60
40
                                                         100
    ngncacgagt tnggctgcnt ctttatacaa cttttcttca
    <210> 39
45 <211> 100
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<212> DNA

<213> Human

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- 35 <221> misc feature
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- aaagngnntn etggnnttan geanttaace eaggeaetgg ggegetgaae agetaeteag 40
 - ctgcttaagt ngtcccactg gtccagacca gcgacccagc
- 100
- 45 <210> 40
 - <211> 102

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                                                                60
    tgtcctgaag gacaagccgn ttcgtttgaa nctgtgaaat ac
                                                            102
20
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    <212> DNA
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    atttgtggtc ggaagetttg caaagagggg acctgggtct gagtgacatg cgtggccact 120
30
    ggtgctcctg cgtttggact gtgcaggcct ctcctatgct gatgcgtctc cccactcctg 180
    agetaattte tgetetgete ettetgtgae atgtggeage gtgggaaata geeaetgtee 240
35
    cctgtccctg ctgttcctgg tgtcacccag caccaggcca ctctgggagc cagggcagat 300
                                                     325
    ggtcctccct gtggtcctgg cctct
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                                                                103
    ggnaggaccc tgntgactcg gggggcggga gcngggancc agg
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45
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60

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    actagatttt actgtagatg gtagataaaa gtccagtgaa aagcaaagat gtgtaatgtt 180
    ttggtagcct cagtgctctt atcccaagta aaagcaaagt t
                                                            221
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10
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    <223> n is a, c, g, or t
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    nncattnngc aagegnacnn gegengeena gengaeeagg
                                                                100
45
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188

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    agatgaactg agataaaatg ntgagatgaa ntgatgagaa gaaatgagat gaaatgagat
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                                                           300
    gagatgatga gatgaaaaat gctgagatga aacntgatga gatgaaatga tgagatgaat
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    tgaantgaaa tgaaataatg aaataatgac ctgagatgan atgaantgat gaactgatga
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60

120

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                                                                       120
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    agggagcctg acgatctgct ctgtgtgcaa ggggagagtt aactctgcac gcaagagcct 240
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aataatcagg caaatcctta agaataaggg caattaagga tgactagccc tacaagattt 180
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atgaagttga ataataaaaa tatattctac actagcacaa attataaata aagcagtgat 420

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515

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    ttttgaattc taaactgtct ctgggtgggt gtgggtgcca ccaagagcat gtgttcatgt 180
    agggagactg gttttttaca gttgtctatg agagagatga cagttgcctg gattatggtg
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    gtgacattgg agataagcag gtagacagat tctcagtgta ttaggagaga aaaatcaata
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    gatgacataa aatgagatga aatgagatgt aatgatggaa tgagatgaga tgaaatgaga
    15
    agatgaatga tgaaatgaaa tgatgagatg agatgatgaa atgaaatggt gagatgaaat
    gatgagatga aatgaaatag tgaaatgaaa ttgaaataaa atcgaaatga gagatgaaat
    gatgagatga tgaaattgat gaaatgatga gatgtgatga gatgaaatga tgagatgaga
20
    tgagatgaca tgaaataatg aaatgaaatt gaaatgagat aagatacgag ctgagatgca
    atgagatgaa atgatgagat gaaatgaaat agtgaaatga aattgaaata aaatcgaaat
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25
    g
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    <211> 125
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                                                                  120
    ngacgcgccg tacaggntna attatggnan cttacatggn aaaggggcan ctcaatgtcc
                                            125
    cacag
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30
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                                                                  120
    atgagatgaa atgttgaaaa gaaaggagga aatgatgagg tgagatgaaa tgatgagatg
35
    aaatgaatct gagatgaaat gagatgaaaa ntgatacgaa aaatgatata aaaaatatga
                                                                180
                                                                 240
    cctgagatga aatgagatga aaaatgatac gaaaaatgat ataaaaaata tgacatgaaa
    40
                                                                 360
    ttgaaagatg agatgaaatg atgagatgaa atgaaatgtt gaaatgatga agagatgtga
                                                                 420
    catgaaatga gctgaaatga gatgaaatga aatgagatta aatgatgaga tgaaaaatga
45
                                                               473
    tgagatgaaa aatgagatga gatgatgaga tgagatgaga tgaattgaga tga
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    60
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    gaaatgagat gaaataaaat aatgaaatga tgaaataatg aaatgaaaat gagatggaaa
                                                           180
30
    tgatgagatg agaagaaatg atgagatgaa atgatgaaat gatgagatga ganaaaatga 240
    300
                                                           360
35
    tgaaatggaa taatgaaatg gaaatgatga gctgagatgc aatgagttga aatgagatga
    aatgatgaaa tgatgagatg aaatgatgaa atgaaataat gaaatgagat gaaataaaat
                                                          420
    aatgaaatga tgaaataatg aaatgaaaat gaaatggaaa tgatgagatg agaagaaatg 480
40
                                             500
    atgagatgaa atgatgaaat
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tgaaatgatg agatgaaatg atgagatgag atgtgatgaa atgatgatat gaaatgatga 120
cataaaatga gatgaaatga gatgtaatga tggaatgaga tgagatgaaa tgagatgaaa 180

tgatagatga gataaaatga tgatagaaa tgatgagatg aatgatgaga tgatgagatg 240 aatgatgaaa tgaaatgatg agatgagatg atgaaatgaa atggtgagat gaaatgatg 299

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35

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                                                                       60
    ctacttnaga ngaantcete gcaaaateet tgaatcaceg etteagtgea gtgatateae 120
    cgccatgaaa tttctgctcg attagcttac gttgtttgga tagaggccaa acaaggctgt 180
45
    tatcggtacg aggaatggat gttcgatttc gtagaatacg cctgagagac ggcgaatact 240
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ctcacgagag gcagcaggcg cgtaaattac ccaattacaa caagtagagg tagcgaagga 300
    aaatatgagg ggtggcaagg ttttgcctgt tacattctca aatggaagca aattagatat 360
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                                              367
    gtcattg
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                                                                    60
    atagaaatca ttatttetgt gggatggata attgggecaa attgtaaaat attttaacta 120
30
    tcagtgtttg gggtttattt ttaaaagaat agggtgccac cagatgttct ttagtggagg 180
    agaaatgagg ccagagtgac tgcctagaaa attaagttgg taaattaatc actttttct 240
                                                 257
    aggtcctttc ttagtct
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    nntaantaaa aagggtgaag aannttactt enettggtee taaaaaacnt tttenteagt
                                                                     120
30
    tattaccaaa atatttggac cattantaaa gantagggcc aacccnaatt tttcttgaaa 180
    tttccgttaa atagccgtta aatgttttta cccatttcat attggatacc ttaaattata 240
35
    ataatggatt ttattgttaa attgtgtgtg tgtggtgtgt atgccctgtc ttttctcctc 300
    taccattatt gtcactttat gtttggaacc ccctttaccc ttccttaaag gaaaaaaagg 360
    gcccggggtt ttt
                                                   373
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30 <223> n is a, c, g, or t
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                                                                     60
35
    ccttgatgtt caagtattta agaccctatg cnaatatttt ttaccttttc taataaacca 120
    tgtttgtt
                                              128
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45
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 - <223> n is a, c, g, or t
- 45 <220>
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                                                                    60
    ggccaggcct tccctttaaa aaaaaatnac cgtttttngg gggangnaac ctttaaaagg 120
    ggaaaanaaa teettttaa anggaantee aagggaagga neetgnneaa naetteeeen 180
30
                                                          213
    ccaataaaaa aaaccntttt ggaaangggg aaa
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35 <211> 443
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    tgatgaaatg agatgagatg agaagaaatg acttgatgag atgagataaa atgatgaaat 120
                                                                     180
    gaaatgaagt gaaatgaaat tgaaatgaga tgagatgaaa tgagataaaa tgatgagatg
15
    aaatgagaag aaatgagatg aaatgatgaa atgatgagat gagatgaaaa atgatgggat
                                                                      240
    gagaaatgag atgaaatgat gggatgaaat gaaatgaaat aatgaaataa tgaaatgaaa 300
20
    tgaattgata atattgaagt gaaattgaaa gatgagattg gatgaaatga tgagatgaaa 360
    tgaaatgttg aaatgaaatg aagagatgta acatgaaatg agctgaaatg atgagatgaa 420
    atgaaatgaa atgagattaa atg
                                                      443
25
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    gacctctgaa tgtattantg anncaagtga tagccaagat attttgaaga aaaatagata 120
25
    ntagggacct gctctataag cccatcataa tttattatga agttataaca agtaaaacag 180
    taaggtattt ggcatggaat agagaaccca gaaacagacc caatgcatgg gtacaggata 240
30
    taacacaggg aaatgaggga caatatatgg ttctgggata attatttata tggggaaaat 300
    aaagaaattg gatccctacc tcacacatac aaaaaaaatc ataattgaat taaaaacttg 360
35
    catgtgaaag gaaagacttt aaaacattta gaaaaagtat tggaggctat gatcttgggg 420
                                                   442
    taggaaagca tttcttttt tt
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    aggagggaaa agaaagaaag gaaggaagga aggaaaagaa agaaagaaag gaaggaagga 120
15
                                                    135
    aggaaggaag gaagg
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                                                                   60
    gagttgcctt ctgtaagtgc ccctactatc aaggtttcat ggaaaatcta ggcaaggcag 120
                                                                      180
    aactteetea gaaggacaag agacaaagaa gtgggggagg eeeteetate catagetgag
35
    agggtttatt ctttgtggtt ctgctgtcag agcctttgga tgtctgatct gagatggagc 240
    aaccccagct agacagaact ttgtagattt tggggggttt aaaaggcctc aagcaaattc 300
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                                                                    120
10
    catteggtee agtgeetege cetattagee ettaageeca eegtttetaa aacteecaga
    acagceaaac eggteegeec aaggeeteeg tegttttata atatatteeg tttaegtata 180
    aggaacgaac eccetteat taccaeggte eegegteege eteettetee attegeaaca
                                                                     240
15
    gttetattee ttteageete eegtacetge tteeagaaca tegeacegee atagtegaaa
    gatagcaaag attacccagc ttctattcct cgccccagag ccgagtaaat cgaagtttat 360
20
    agaggggaa tccaaccatt caagagttat aacaagttat cggcactcgg gggatcagaa 420
    tataaactta atgteeeett tatteteeeg gaegeeeett ttaaceaett etteetatet 480
    ttegetaaca agecattgae ggegetttge egegegggee eatetegegt
                                                                  530
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    <211> 332
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                                                                       60
     aaatgaaatg aaataatgaa atgaaattga aataaaattg aaatgagatg agatgaaatg
                                                                     120
     atgagatgat gaaataaaat gatgaaatga gatgtgatga gatgaaatga ngagatgaaa
                                                                      180
40
     tgatgagatg agatgacatg aaataaatga aataatgaaa tcgaaatgag atgagaagat
                                                                      240
     acgagatgag atgaaatgat gagatgaaat gatgaaatga gataagatga aaagagttga
                                                                       300
45
     tgagatgatg agatgaaatg agatgaaaag agatgaaatg agatgaaatg aaatgatgag
                                                                       360
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	gaaaaaaatga aatgaaataa tgaaatgagg tgaaattaaa tgagatgatg aaattaaatg	480
5	atgaaatgaa ataatgaaat ggaaatgaaa tggaaatgat gagatgaatg atgagatgaa	540
	atgatgagat gagatgtatt gatgagagga aatgatgaga tgtaatgaaa tgagatgaaa	600
10	tgaatgagat gaaatggaat antggaangg aaattgattg gngatttgag atgaaatgag	660
10	ntaaatgnga tgaattaatg atgagatgaa atgntgaatg ccggggtgnn tgagatgaat	720
	tgagttgaac cctgngatga atgaagattg nntgaatggt ggntgaatgt tgaatggntg	780
15	gntggnanaa tgcctgtngg 800	
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30	tgaaatgaaa tgagattaaa tgatgagatg aaaactgatg aaaacttaaa tgatgaaata	240
	atgaaatgaa aatgaaatgg aaatgatgag atgagaagaa atgatgagat gagatgagat	300
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5
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    <211> 500
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10
    <213> Human
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15
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25
    agatgaaaag agttgatgag atgatgagat gaaatgagat gaaaagagat gaaatgagat
                                                                 120
    gaaatgaaat gatgagatga aatgaggtga aatgaaatta gatgaaacgt aatgagatga
                                                                 180
30
    aatgacctaa tgaaatgaaa aaatgaaatg aaataatgaa atgaggtgaa attaaatgag
                                                                240
                                                                300
    atgatgaaat taaatgatga aatgaaataa tgaaatggaa atgaaatgga aatgatgaga
35
                                                                 360
    tgaatgatga gatgaaatga tgagatgaga tctaatgatg agaggagatg atgagatgaa
                                                                  420
    ntgagatgaa aagagatgaa atgagatgaa accgaaatga tgagatgaaa tgaggtgaaa
    40
                                                 500
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<213> Human

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 - <223> n is a, c, g, or t
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45

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246
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10
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    <211> 18
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25 <213> Artificial Sequence
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30
    <220>
    <221> primer bind
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35
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                                                  18
    <210> 105
40
    <211> 24
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    <213> Artificial Sequence
45 <220>
    <223> forward primer of ßMyHC gene used for quantitative RT-PCR
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analysis

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                                                    24
10
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        analysis
20
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    <221> primer bind
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25
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                                                   24
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45
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10
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    <223> forward primer of APP used for quantitative RT-PCR analysis
25
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    <221> primer bind
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30
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                                                  20
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    <213> Artificial Sequence
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40
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45 <221> primer bind
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5
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10
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    <223> forward primer of ZFP used for quantitative RT-PCR analysis
    <220>
15
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20
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30
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35
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